We Claim:

1. A solar collector comprising:

a top portion comprising glazing,

a bottom portion;

an absorber disposed between said top portion and said bottom portion for absorbing solar energy received through said glazing, said absorber in a spaced relationship above said bottom portion such that a channel is defined between a lower surface of said absorber and an upper surface of said bottom portion;

an inlet and an outlet associated with and at substantially opposite ends of said channel between said absorber and said bottom portion, for ventilating said channel; and

a damper for opening said outlet at a temperature equal to or above a first selected temperature and for closing said outlet at a temperature equal to or below a second selected temperature;

wherein said first and second selected temperatures are below a stagnation temperature of the solar collector.

2. The solar collector of claim 1, wherein said first selected temperature and said second selected temperature are the same.

3. The solar collector of claim 1, wherein said bottom portion comprises said inlet and said outlet.

4. The solar collector of claim 1, wherein said outlet is elevated relative to said inlet.

5. The solar collector of claim 1, wherein at least one surface defining said channel is a high-emissivity surface.

6. The solar collector of claim 5, wherein said high-emissivity surface comprises a high-emissivity coating.

7. The solar collector of claim 5, wherein said at least one surface has an emissivity of at least 0.5.

8. The solar collector of claim 1, wherein said absorber is in a substantially parallel spaced arrangement below said glazing.

9. The solar collector of claim 8, wherein said space between said absorber and said glazing is isolated from said channel.

10. The solar collector of claim 1, wherein at least one of said opening and said closing of said damper is passively-actuated.

11. The solar collector of claim 10, wherein said damper is thermally-actuated.

12. The solar collector of claim 11, wherein said thermally-actuated damper comprises at least one member selected from the group consisting of a gas-charged piston, a wax-filled actuator, a bimetallic spring, and a shape-memory alloy.

13. The solar collector of claim 11, wherein said thermally-actuated damper comprises a shape-memory alloy.

14. The solar collector of claim 1, wherein, upon opening of said outlet, air flows from said inlet through said venting channel to said outlet by convection, and wherein, upon closing of said outlet, said airflow by convection substantially stops.

15. The solar collector of claim 1, further comprising a damper for opening and closing said inlet.

16. A method of controlling temperature in a solar collector, the solar collector comprising a top portion comprising glazing, a bottom portion, and an absorber disposed between said top portion and said bottom portion for absorbing solar energy received through said glazing, said method comprising:

disposing said absorber in a spaced relationship above said bottom portion such that a channel is defined between a lower surface of said absorber and an upper surface of said bottom portion;

providing an inlet and an outlet associated with and at substantially opposite ends of said channel, for ventilating said channel;

opening said outlet at a temperature equal to or above a first selected temperature; and

closing said outlet at a temperature equal to or below a second selected temperature;

wherein said first and second selected temperatures are below a stagnation temperature of the solar collector.

17. The method of claim 16, further comprising disposing said solar collector such that said outlet is elevated relative to said inlet.

18. The method of claim 16, further comprising providing high emissivity to at least one of said surfaces defining said channel.

19. The method of claim 18, wherein said at least one high emissivity surface is provided by applying a high emissivity coating thereto.

20. The method of claim 16, further comprising providing an emissivity of at least about 0.5 to at least one of said surfaces defining said channel.

21. The method of claim 16, further comprising passively opening and closing said outlet.

22. The method of claim 21, further comprising using a thermally-actuated damper for opening and closing said outlet.

23. The method of claim 22, wherein opening and closing of said outlet is performed by an actuator selected from the group consisting of a gas-charged piston, a wax-filled actuator, a bimetallic spring, and a shape-memory alloy.

24. The method of claim 22, wherein said opening and closing of said outlet is performed by a shape-memory alloy actuator.

25. The method of claim 16, further comprising opening and closing said inlet.

26. The method of claim 16, wherein said first selected temperature and said second selected temperature are substantially the same.

27. A method of preventing overheating of a solar collector, the solar collector comprising a top portion comprising glazing, a bottom portion, and an absorber disposed between said top portion and said bottom portion for absorbing solar energy received through said glazing, said method comprising:

disposing said absorber in a spaced relationship above said bottom portion such that a channel is defined between a lower surface of said absorber and an upper surface of said bottom portion;

providing an inlet and an outlet associated with and at substantially opposite ends of said channel, for ventilating said channel;

opening said outlet at a temperature equal to or above a first selected temperature; and

closing said outlet at a temperature equal to or below a second selected temperature;

wherein said first and second selected temperatures are below a stagnation temperature of the solar collector.

28. The method of claim 27, further comprising disposing said solar collector such that said outlet is elevated relative to said inlet.

29. The method of claim 27, further comprising providing high emissivity to at least one of said surfaces defining said channel.

30. The method of claim 29, wherein said at least one high emissivity surface is provided by applying a high emissivity coating thereto.

31. The method of claim 27, further comprising providing an emissivity of at least about 0.5 to at least one of said surfaces defining said channel.

32. The method of claim 27, further comprising passively opening and closing said outlet.

33. The method of claim 32, further comprising using a thermally-actuated damper for opening and closing said outlet.

34. The method of claim 33, wherein opening and closing of said outlet is performed by an actuator selected from the group consisting of a gas-charged piston, a wax-filled actuator, a bimetallic spring, and a shape-memory alloy.

35. The method of claim 33, wherein said opening and closing of said outlet is performed by a shape-memory alloy actuator.

36. A solar energy system comprising:

the solar collector of claim 1;

heat transfer apparatus for removing heat from said collector; and

a heat sink or load for accepting heat from said heat transfer apparatus.

37. The solar energy system of claim 36, wherein said heat transfer apparatus comprises a heat transfer fluid.

38. The solar energy system of claim 36, wherein the system is a solar hot water system.